IN THE CLAIMS

Please amend Claim 14 as shown below. The claims, as pending in the application, read as follows.

1 to 13. (Canceled)

14. (Currently Amended) A multi-beam scanning optical system comprising:

incidence optical means for guiding a plurality of beams emitted from light source means having a plurality of light-emitting regions spaced apart from each other in a main scanning direction, to deflecting means;

scanning optical means for focusing the plurality of beams deflected by the deflecting means on a surface to be scanned, to form a plurality of scan lines; and

synchronism-detecting optical means for guiding part of the plurality of beams deflected by the deflecting means, to a synchronism detector ~~by a lens section~~ and controlling timing of a scan start position on the surface to be scanned for ~~each of~~ the plurality of beams by use of a signal from the synchronism detector,

wherein the following condition is satisfied:

$|\delta M2| < \delta Ymax/\tan(\theta max)$

where

$\delta M2$: defocus amount in a main scanning section of the beams guided to the synchronism detector and in a view from a photoreceptive surface of the synchronism detector;

δY_{max}: permissible dot shift amount per scan line, which is not more than half of resolution in a sub-scanning direction;

θ_{max}: maximum angle difference between angles of incidence to the photoreceptive surface of the beams used for detection of synchronism.

15. (Canceled)

16. (Original) The multi-beam scanning optical system according to Claim 14, comprising correction means for relatively shifting a focus position in the main scanning section of the beams guided to said synchronism detector in a direction of the optical axis of said synchronism-detecting optical means from the photoreceptive surface of the synchronism detector.

17. (Original) The multi-beam scanning optical system according to Claim 14, comprising correction means for moving the position of said synchronism detector or a unit including the synchronism detector in a direction of the optical axis of said synchronism-detecting optical means.

18. (Original) The multi-beam scanning optical system according to Claim 14, wherein said lens section is disposed in an optical path between said deflecting means and said synchronism detector, said optical system comprising correction means for moving said lens section in a direction of the optical axis of said synchronism-detecting optical

means.

19. (Original) The multi-beam scanning optical system according to Claim 14, wherein at least one lens forming said lens section is integrated with said scanning optical means, said optical system comprising correction means for moving at least one lens of the lens section not integrated with the scanning optical means, and said synchronism detector in a direction of the optical axis of said synchronism-detecting optical means.

20. (Original) The multi-beam scanning optical system according to Claim 14, wherein said lens section is integrated with said scanning optical means, said optical system comprising correction means for moving at least one optical element of the scanning optical means in a direction of the optical axis of the scanning optical means and for moving said synchronism detector in a direction of the optical axis of said synchronism-detecting optical means.

21. (Original) The multi-beam scanning optical system according to Claim 14, wherein at least one lens forming said lens section is integrated with said scanning optical means, said optical system comprising correction means for moving at least one lens forming the scanning optical means in the main scanning direction.

22 to 36. (Canceled)

37. (Previously Presented) An image forming apparatus comprising:

the multi-beam scanning optical system as set forth in any one of Claims 14, 16 to 21 and 40;

a photosensitive member placed on said surface to be scanned;

a developing unit for developing an electrostatic latent image formed on said photosensitive member with scanning light by said multi-beam scanning optical system, into a toner image;

a transfer unit for transferring said developed toner image onto a transfer medium; and

a fixing unit for fixing the transferred toner image on the transfer medium.

38. (Previously Presented) An image forming apparatus comprising:

the multi-beam scanning optical system as set forth in any one of Claims 14, 16 to 21 and 40; and

a printer controller for converting code data supplied from an external device, into an image signal and entering the image signal into said multi-beam scanning optical system.

39. (Canceled)

40. (Previously Presented) A multi-beam scanning optical system comprising:

incidence optical means for guiding a plurality of beams emitted from light source means having a plurality of light-emitting regions spaced apart from each other in a main scanning direction, to deflecting means;

scanning optical means for focusing the plurality of beams deflected by the deflecting means, on a surface to be scanned, to form a plurality of scan lines; and

synchronism-detecting optical means for guiding part of the plurality of beams deflected by the deflecting means, to a synchronism detector and controlling timing of a scan start position on the surface to be scanned for the plurality of beams by use of a signal from the synchronism detector,

wherein a dot shift per scan line on the surface to be scanned, which occurs because of a defocus amount $\delta M2$ in a main scanning section of the beams guided to said synchronism detector and in a view from a photoreceptive surface of said synchronism detector, is not more than half of resolution in a sub-scanning direction.

41 to 42. (Canceled)